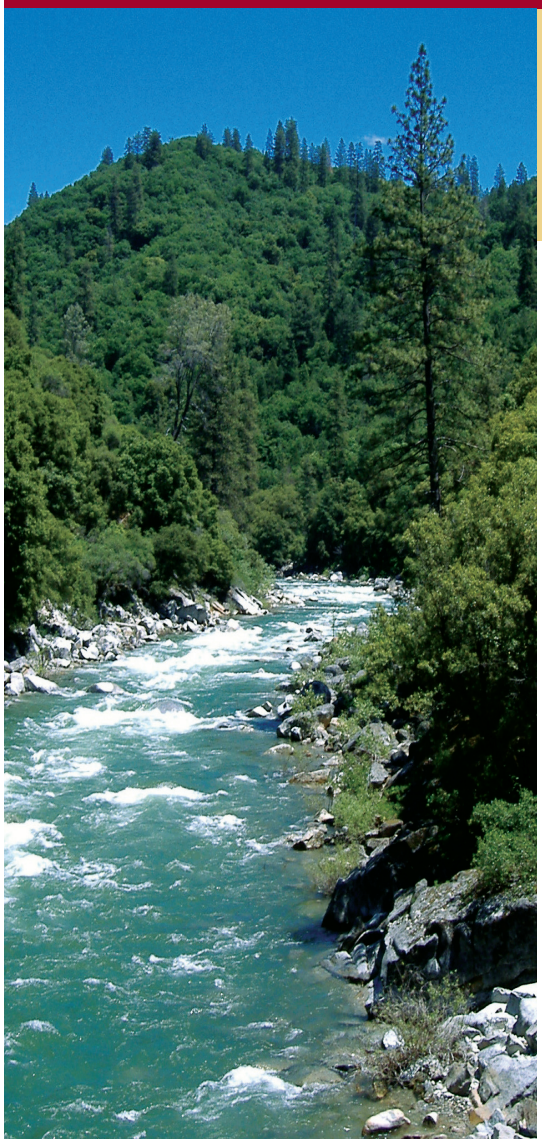

Sierra Nevada Bioenergy Facts

Investing in forest health and clean energy

Over the past 5 years, over 4.5 million acres of California forests have been impacted by wildfire. Due to current unhealthy forest conditions and a changing climate, many predict that the size and intensity of these fires will continue to increase unless the pace and scale of forest treatments are increased. These treatments involve removing excess biomass fuel, or the small-diameter woody material, branches, and diseased or insect infested wood that is not suitable for commercial use. Recent innovations in biomass energy technology provide an opportunity for the economically and environmentally sustainable use of biomass material to create renewable energy for California, while at the same time protecting forests and communities from large, damamging wildfires.

In addition, use of biomass materials to generate energy can maximize the greenhouse gas reduction benefits that the forest sector can provide:

- Initial estimates indicate that the Rim Fire released 11,352,608 metric tons of greenhouse gas emissions - equivalent to the annual carbon dioxide emissions of 3.2 coal fired power plants.
- Burning biomass in a controlled biomass facility instead of open burning can reduce carbon dioxide emissions by 98%. This can be true even when accounting for the emission created by the transport and processing of biomass to create energy.

Development of additional biomass power generation facilities in the Sierra Nevada Region that utilize forest waste would provide a ready market for biomass removed as a byproduct of forest restoration activities.

The Sierra Nevada Conservancy is a state agency that carries out a mission of protecting the environment and economy in a complementary fashion across 25 million acres, one-quarter of the state. To learn more, please visit the Sierra Nevada Conservancy Web site.

Biomass represents a huge untapped resource for the generation of heat and power, and it's removal will improve forest health and reduce the risk of catastrophic wildfire.

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